

Name: _____

Date: _____

FOIL when $A \neq 1$ SLTN (version 106)

FOIL the expressions shown below:

1. $(-2x - 5)(7x + 7)$

$$\begin{aligned} &(-2)(7)x^2 + (-2)(7)x + (-5)(7)x + (-5)(7) \\ &(-14)x^2 + (-14)x + (-35)x + (-35) \\ &-14x^2 - 49x - 35 \end{aligned}$$

2. $(-5x - 3)(6x - 5)$

$$\begin{aligned} &(-5)(6)x^2 + (-5)(-5)x + (-3)(6)x + (-3)(-5) \\ &(-30)x^2 + (25)x + (-18)x + (15) \\ &-30x^2 + 7x + 15 \end{aligned}$$

3. $(-8x + 6)(-7x + 9)$

$$\begin{aligned} &(-8)(-7)x^2 + (-8)(9)x + (6)(-7)x + (6)(9) \\ &(56)x^2 + (-72)x + (-42)x + (54) \\ &56x^2 - 114x + 54 \end{aligned}$$

4. $(7x + 5)(9x + 7)$

$$\begin{aligned} &(7)(9)x^2 + (7)(7)x + (5)(9)x + (5)(7) \\ &(63)x^2 + (49)x + (45)x + (35) \\ &63x^2 + 94x + 35 \end{aligned}$$

5. $(-2x + 6)(7x + 9)$

$$\begin{aligned} &(-2)(7)x^2 + (-2)(9)x + (6)(7)x + (6)(9) \\ &(-14)x^2 + (-18)x + (42)x + (54) \\ &-14x^2 + 24x + 54 \end{aligned}$$

FOIL the expressions shown below:

6. $(-2x + 9)(-3x - 2)$

$$\begin{aligned} &(-2)(-3)x^2 + (-2)(-2)x + (9)(-3)x + (9)(-2) \\ &\quad (6)x^2 + (4)x + (-27)x + (-18) \\ &\quad \quad 6x^2 - 23x - 18 \end{aligned}$$

7. $(-2x - 7)(8x - 3)$

$$\begin{aligned} &(-2)(8)x^2 + (-2)(-3)x + (-7)(8)x + (-7)(-3) \\ &\quad (-16)x^2 + (6)x + (-56)x + (21) \\ &\quad \quad -16x^2 - 50x + 21 \end{aligned}$$

8. $(-8x + 7)(6x - 9)$

$$\begin{aligned} &(-8)(6)x^2 + (-8)(-9)x + (7)(6)x + (7)(-9) \\ &\quad (-48)x^2 + (72)x + (42)x + (-63) \\ &\quad \quad -48x^2 + 114x - 63 \end{aligned}$$

9. $(4x + 7)(-4x + 6)$

$$\begin{aligned} &(4)(-4)x^2 + (4)(6)x + (7)(-4)x + (7)(6) \\ &\quad (-16)x^2 + (24)x + (-28)x + (42) \\ &\quad \quad -16x^2 - 4x + 42 \end{aligned}$$

10. $(2x + 8)(-9x - 4)$

$$\begin{aligned} &(2)(-9)x^2 + (2)(-4)x + (8)(-9)x + (8)(-4) \\ &\quad (-18)x^2 + (-8)x + (-72)x + (-32) \\ &\quad \quad -18x^2 - 80x - 32 \end{aligned}$$